

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I JOHN F. KENNEDY FEDERAL BUILDING BOSTON, MASSACHUSETTS 02203-0001



MEMORANDUM

DATE: July 29, 1996

SUBJ: Request for 12-Month Exemption, \$2 Million

Exemption/Ceiling Increase and Change in Scope of Response at the Johns Manville Corporation

Manufacturing Plant Site, Nashua,

Quell Houly New Hampshire - Action Memorandum - Addendum

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I. PURPOSE

The purpose of this Action Memorandum is to request and document approval for a 12-month exemption, a \$2 million exemption/ceiling increase and a change in the scope of the response to continue and complete the removal action described herein.

The On-Scene Coordinator (OSC) has identified a threat to human health, welfare, and the environment at the Johns Manville Corporation Manufacturing Plant Site (the "Site"). This request incorporates and updates information presented in the June 16, 1995 Action Memorandum (Attachment A).

The OSC has determined based on continued site evaluation and assessment that conditions at the Site continue to meet the criteria for a Removal Action under the National Contingency Plan (NCP), and continue to meet the statutory exemption criteria based on the emergency waiver in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, Section 104(c)(1), 42 U.S.C. Section 9604 (c)(1). This information was compiled between July 11 and October 20, 1995 and can be obtained in the document, "Status Report", dated October 20, 1995 by Roy F. Weston. This document is a summary of sample data generated by EPA, EPA Emergency Response Team (ERT) and Superfund Technical Assistance and Response Team (START) contractors. Additional time and funds are being requested to



continue removal actions and address the source areas of contamination at the Site. This Change in Scope will mitigate the source of contamination. Approval of the request would raise the project ceiling to \$2,340,000, of which approximately \$1,200,000 are extramural costs.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID#:

NHD001085372

Site ID#:

21

Category:

Time-critical

A. Site Description

The original Action Memorandum was signed on June 26, 1995 by John P. DeVillars, Regional Administrator. The OSC mobilized the Emergency Response Cleanup Services (ERCS) contractor to the Site on July 11, 1995.

The Site consists of portions (shown in Figure 1) of the abandoned former Johns Manville Corporation Manufacturing Plant, an asbestos product facility. Johns Manville Corporation began manufacturing operations at the Site in 1900 and continued until December, 1985. The company combined asbestos fibers with cement and produced sheets of insulating materials and industrial insulation products.

The Johns Manville Corporation, beset by lawsuits seeking cost recovery for clean-up and removal of asbestos products at sites throughout the country, sought protection in bankruptcy court. In December, 1987, the Nashua plant was sold. The Site buildings have not been used for any manufacturing activities since June 1990. The building condition has deteriorated due to lack of maintenance.

The 121,294 square foot (approximately 4 acres) parcel of land includes two vacant manufacturing facilities. The topography is generally level.

The Site is bordered:

north - Nashua River which flows into the Merrimack River.

east - an industrial complex being revitalized and the Merrimack River.

south - Bridge Street and a residential and light industrial area.

west - railroad tracks which separate the Site from a low income residential area.



Census data shows that the area suffers many common urban ills - high unemployment, low educational attainment and income. The south and west residential areas are comprised of older milltown double decker apartments (80% are rentals).

The residential area which borders the south and west of the Site meets the environmental justice criterium in the following ways:

- 60% of these homes were built before 1939;
- 25% of the residents speak a language other than English;
- 18% of these homes are without telephone service;
- 14% of the housing units meet guidelines for overcrowding.

The population within a one-mile radius of the Site is approximately 13,440. Within this radius, there are 13 schools (day care, kindergarten, elementary and high schools), 1 hospital and 13 housing units (elderly, low income and half way homes).

Due to the recent severe winter, considerable structural damage impacted the structural integrity of the buildings; a large portion of one roof collapsed, subsequently damaging the baghouse ventilation system which in turn released friable asbestos to the collapsed area. As a result of roof leakage and the age of the building, large sections of floors along with roof sections are deteriorating.

As a result of inactivity and the presence of salvageable material at the abandoned property, it has been trespassed upon by area youth and scrap scavengers.

B. EPA Action To date

EPA removed the following waste during the initial Removal Action in 1995:

- 500 containers of flammable liquids and other hazardous materials;
- sludge from six underground tanks;
- PCB-contaminated oil;
- one leaking transformer containing 630 gallons of PCB oil;
- eight capacitors containing PCB oil;
- 140 cubic yards of friable asbestos waste resulting from illegal asbestos operations; and
- 600 cubic yards of combustible asbestos-contaminated waste material.

A status report of the site and facility conditions was prepared by Roy F. Weston on October 20, 1995 to summarize the data collected during the initial Removal Action. The report is titled, Status Report of the Johns Manville Company Site. See summary table below.



C. Summary Sampling Data:

Sample description	Location	% Total Asbestos*	
Interior floor dust	Bldg. #40	2 -20%	
Machinery	Bldg. #40	30%	
Baghouse ventilation system	Roof pipe contents	40%	
Roofing felt	Bldg. #10 & 40	50%	
Building wall materials	Bldg. #10 & 40	45-60%	
Interior inside walls/dust	Building #10 J074(3)	25-80% 5-10% amosite	
Surface Soil - Exterior	Building Perimeters	▲ 40% ◆ 15-20% ▼ 50%	

^{*}Percent friable concentration of chrysotile performed by Polarized Light Microscopy.

- ▲ TRC coring data (Assessment Report) 1-3' depth
- ◆ RF Weston Status report- Sanders Street (surface)
- ▼ RF Weston Status report- Building #40 perimeter (surface)

The final phase of planned work involved the ERCS contractor preparing an emergency contingency plan for demolition which assessed the remaining surface hazards, structural problems, and subsurface contamination. ERCS delivered the Final Work Plan on May 20, 1996. The plan contains a scope of work for demolition and restoration of the property with related cost estimates. Costs for complete demolition of the buildings, disposal of the debris at an EPA approved landfill, and restoration of the property are estimated at approximately \$5,300,000.

In order to solicit additional funding from other sources, EPA Region I staff proposed the Site to EPA Headquarters in May for priority funding of the above-described removal actions.

D. National Priority List (NPL) Status

The Johns Manville Site is not currently listed on the NPL, nor is it expected to be.



E. State and Local Authorities' Roles

The State of New Hampshire Department of Environmental Services, (NHDES) Waste Management Division (the "State") and the City of Nashua (the "City") have been joint shareholders during the initial Removal Action. They both provided in kind financial support. The State provided contractor services by pumping out six underground storage tanks, and disposing of their contents. The City has provided their landfill for disposal of asbestos waste. The OSC will continue to coordinate site activities with State and City officials.

- January 12, 1994 the City of Nashua issued an Emergency Order and Notice of Unsafe Structures to current owner.
- November 28, 1994 the City installed an eight foot perimeter security fence at the facility to restrict Site access.
- April 7, 1995 the City issued an order to the present owner for the "demolition and removal" of a hazardous structure.
- April 26, 1995 NHDES officials requested that EPA initiate an emergency removal action.
- June 27, 1996 EPA received a letter of commitment from NHDES documenting its continued support to the cleanup of the Site. The letter stated that NHDES has provided over \$100,000 of in kind support, e.g., funding the decontamination of six underground storage tanks, and has agreed to perform the long term inspection of the Site upon completion of the removal action.
- July 12, 1996 EPA received a letter of commitment from the City documenting its continued support to the cleanup of the Site. The letter stated that the City has pledged over \$1.5 million of in kind support to the project. This includes waiver of permit and tipping fees related to the disposal of the asbestos at the Four Hills Landfill, a waiver of all costs in the construction of an asbestos disposal cell at the landfill, and the coordination and support of all public services departments as required. Currently the City is maintaining the perimeter fence and the police are monitoring the Site. Fire Department personnel perform internal security sweeps on a weekly basis.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

Section 300.415(b)(2) of the National Oil and Hazardous Substance Pollution Contingency Plan, 40 CFR 300, et seq, outlines the factors which should be considered in determining the appropriateness of a removal action. Sections 300.415 (b)(2)(i), (iv), (v), and (vii) are directly applicable to the situation at the Johns Manville Site.



300.415 (b)(2)(i) "Actual or potential exposure to nearby human population, animal, or food chain from hazardous substances or pollutants or contaminants"

The Site is near residential areas and creates a potential threat for exposure to humans from observed friable asbestos, a listed hazardous substance and pollutant. Asbestos is in and on the building walls, floors, and surrounding surface soil as a result of past construction and manufacturing practices. Baghouse ventilation pipes broken when the roof collapsed have released friable asbestos.

Exposure of humans to asbestos can result in asbestosis, a chronic and debilitating lung disease, and the development of mesothelioma, a form of cancer. Asbestos related malignancies may exhibit a latency period of up forty years.

The Agency for Toxic Substance and Disease Registry (ATSDR) issued a Health Consultation on February 29, 1996 for the Johns Manville Property Site in coordination with the New Hampshire Division of Public Health Services. The report stated that the Site posed a public health hazard because of physical and chemical hazards due to the deteriorated condition of the buildings and their imminent collapse.

300.415 (b)(2)(iv) "High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate"

Extremely high levels of asbestos are present in the broken baghouse ventilation pipes, in the soil and within the building walls. Sampling results from the 1995 report document extensive contamination throughout the site. Asbestos is susceptible to migration via the wind and runoff action generated by precipitation.

300.415 (b)(2)(v) "Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released"

Winds and rain have a degrading effect on the decomposition of the asbestos board throughout the facility, creating an exterior friable condition and enabling potential dispersion of the contaminant.

300.415 (b)(vii) "The availability of other appropriate Federal or State response mechanisms to respond to the release"

The NHDES and the City of Nashua do not have the resources to undertake a removal at this time.



IV. EXCEPTION FROM STATUARY LIMITS

The Site continues to meet the emergency exemption criteria in Section 104(c) of CERCLA 42 U.S.C. Section 9604(c), as amended, to exceed the \$2 million and 12-month statutory limit for Removal Actions:

Section 104(c)(1)(i) "continued response action are immediately required to prevent, limit, or mitigate an emergency"

Immediate stabilization of the contaminated areas of concern is needed to prevent the spread of the contaminants into the environment. Asbestos-contaminated surface soils are present, building surface materials are friable, and the damaged pipes within the baghouse ventilation system provide the opportunity for release of friable asbestos to the atmosphere. The facility is within a residential area. It is a potential source for an air release episode due to the high winds generated from the nearby open river area. This action is required to prevent or mitigate contamination of the environment.

Section 104(c)(1)(ii) "there is an immediate risk to the public health or welfare or the environment"

The potential for release of airborne asbestos fibers from the damaged baghouse ventilation system and the asbestos corrugated building exterior panels and siding poses a direct contact, ingestion or inhalation threat to individuals entering the Site, the surrounding area, or the residential community and so poses an immediate risk to the public health.

Section 104(c)(1)(iii) "assistance will not be otherwise be provided on a timely basis"

Neither the State nor the City have the resources required to undertake a cleanup action of the magnitude needed at this Site.

V. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from the Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions Description

The OSC estimates ERCS contractor costs for complete demolition of the buildings, disposal of



the debris at Nashua's landfill (at no cost to the government), and restoration of the property to be \$3,800,000. Due to the limited ERCS Regional Removal Allowance, a funding allocation of only \$650,000 is available through the Region at this time. Therefor, the proposed continuation of the Removal Action will be performed as a phased cleanup.

For clarity, the phase addressed by this document will be called Phase 2. The primary objectives of Phase 2 are to:

- (1) perform air monitoring on and off-site to determine air quality during the demolition activities;
- (2) mitigate the direct contact, inhalation and ingestion threats posed by the asbestos contamination from Building No. 40's (see Figure 1) collapsed roof and its related super-structure baghouse systems by partial demolition (as a minimum, whatever is required to get to the baghouse systems) and off site disposal at the city's landfill;
- (3) dismantle and dispose off site of Building No. 10, which is structurally unsound and heavily contaminated with asbestos, and its contents;
- (4) cap asbestos-contaminated soil; and
- (5) decontaminate the disassembled metal beams, related steel equipment and baghouse ventilation-related systems where possible. Effectiveness of decontamination will be determined by a combination of visual inspection and wipe sampling to determine if asbestos is still present.

Phase 2 will take approximately four months to complete. On-site removal activities are expected to commence in mid August 1996.

Phase 3 and other related cleanup phases to complete the demolition of Building No. 40 and the restoration and capping of the site to enable it to be productively used will follow if and when funding becomes available.



B. Estimated Costs

EXTRAMURAL COSTS	Current Ceiling	Cost to Date	Proposed Ceiling
Regional Allowance Costs:			
- ERCS Cleanup Contractor	\$ 500,000	\$ 443,457	\$1,150,000
- Contingency costs	\$ -0-	\$ -0-	\$ 50,000
Other Extramural Costs Not Funded From Regional Allowance:			
- START Costs	\$ 260,000	\$ 73,200	\$ 300,000
- ERT/READ Costs	\$ 90,000	\$ 3,306	\$ 90,000
- Contingency Costs	\$ -0-	\$ 100,000	\$ 100,000
TOTAL, EXTRAMURAL COSTS and CONTINGENCY	\$ 850,000	\$ 619,963	\$1,690,000
INTRAMURAL COST:			
- Direct Costs (HQ and Region)	\$ 80,000	\$ 123,165	\$ 350,000
- Indirect Costs	\$ 60,000	\$ 57,248	\$ 200,000
- Contingency Costs	\$ -0-	\$ -0-	\$ 100,000
TOTAL PROJECT CEILING	\$ 990,000	\$ 800,376	\$2,340,000

C. Contribution to Remedial Performance

There are no plans for long term Remedial Action at the Johns Manville Site. Removal Action shall, to the extent practicable, contribute to the efficient performance of any anticipated long-term remedial action.



D. Compliance with ARARs

The proposed Removal Action set forth in this memorandum will comply with applicable, relevant, and appropriate environmental and health requirements (ARARs) to the extent practicable considering the exigencies of the situation, including requirements of the Resource Conservation and Recovery Act. The OSC has consulted with appropriate EPA staff on the proposed action.

The OSC has consulted verbally with State officials on the proposed actions, and requested in a letter dated June 30, 1995 that NHDES supply written notification regarding statues and regulations that the State believed are potential ARARs for the Johns Manville Site. NHDES replied by letter on July 10, 1995, listing the ARARs. The OSC will keep NHDES updated throughout the Removal so that any ARARs not yet identified can be addressed.

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If no action is taken or the proposed action is further delayed, inhalation and ingestion threats posed by the asbestos at the site to the nearby residents and to workers will continue. Furthermore, the site will not be useable for any type of future development.

VIII. <u>ENFORCEMENT</u>

The EPA Removal Enforcement group has been provided with all the background information available to pursue any and all enforcement actions pertaining to the Johns Manville Site. There has been no additional enforcement action since the 1995 funding request was approved. There are no identifiable potentially responsible parties able to adequately perform the action proposed in this memorandum. The previous enforcement strategy still applies.



IX. <u>RECOMMENDATION</u>

Since the conditions at the Site meet:

the criteria set forth in 40 CFR 300.415 of the National Oil and Hazardous Substance Pollution Contingency Plan,

the statutory criteria for a continued removal response,

the CERCLA section 104(c) consistency exemption from the 12-month limitation, and the emergency exemption from the \$2 million limitation,

I recommend your approval for the Change in Scope and the \$2 million exception for the proposed Removal Action.

The total project ceiling, if approved, will be \$2.34 million, of which \$1,200,000 is for extramural cleanup contractor costs. The latter amount includes \$500,000 from FY 95 funds and the current \$700,000 (including \$50,000 contingency) from the FY 1996 Regional removal allowance.

APPROVAL: ______ DATE _______ DATE _______

Attachments:

Attachment A: Action Memorandum dated June 16, 1995

Figure 1 - Johns Manville Site Property Line